IN THE CLAIMS

1-4. (Cancelled).

Claim 5 has been amended as follows:

5. (Currently Amended) A method for correcting pixels of an x-ray image data set, comprising the steps of:

acquiring a current x-ray exposure of an examination subject with an x-ray apparatus using a reusable storage plate as an x-ray detector, said storage plate comprising a storage luminophore layer having a sensitivity that changes dependent on an accumulated x-ray dose to which said storage luminophore has been exposed in said current x-ray exposure and in said x-ray exposures using said storage plate ~~preceeding~~ preceding said current exposure;

reading out said storage plate with a readout device after acquiring x-ray exposure;

from the readout of said storage plate, generating an x-ray image data set corresponding to said x-ray exposure, said x-ray image data set comprising a plurality of data set pixels respectively corresponding to pixels of said current x-ray exposure; and

correcting each of said data set pixels with a correction value associated with the pixel corresponding thereto in the current x-ray exposure, by adapting each correction value dependent on accumulated x-ray ~~dose~~ dosage to which a portion of the storage ~~film~~ plate containing the pixel corresponding to the data set pixel was exposed ~~subject~~ in said current x-ray exposure and in said x-ray exposures using said storage plate ~~preceeding~~ preceding said current exposure.

6. (Previously Presented) A method as claimed in 5, comprising correcting pixels $RB_{i,j}^{m}$ of the m-th x-ray image data set according to the following:

$$B_{i,j}^{m} = a * RB_{i,j}^{m} / EB_{i,j}^{m},$$

wherein

a is a first scaling factor,

$RB_{i,j}^{m}$ is the signal of the pixel i, j of the m-th x-ray image data set,

$EB_{i,j}^{m}$ is the correction value for the pixel i, j of the m-th x-ray image data set and

$B_{i,j}^{m}$ is the signal of the pixel i, j of the m-th corrected x-ray image data set.

Claim 7 has been amended as follows:

7. (Previously Presented) A method as claimed in claim 6, comprising determining the accumulated x-ray dose $D_{i,j}^{m}$ for a region of the storage plate that is associated with the pixel i, j of the x-ray image data set according to the following relation for the m-th x-ray image data set:

$$D_{i,j}^{m} = \sum_{n=1}^{m-1} b * B_{i,j}^{n},$$

wherein *b* is a second scaling factor.

8. (Previously Presented) A method as claimed in claim 7, comprising determining the correction value $EB_{i,j}^{m}$ for the pixel i, j of the m-th x-ray image data set according to the following relation:

$$EB_{i,j}^{m} = EB_{i,j}^{0} - s * \left(\sum_{n=1}^{m-1} b * B_{i,j}^{n} \right),$$

wherein *s* is a constant and $EB_{i,j}^{0}$ is the correction value that is associated with the storage film without applied x-ray dose.